

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE  
(REV. 2-2-05)

ATTORNEY'S DOCKET NUMBER

51579/DMC/A599

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

**10/535616**INTERNATIONAL APPLICATION NO.  
PCT/US2003/037298INTERNATIONAL FILING DATE  
21 November 2003 (21.11.2003)PRIORITY DATE CLAIMED  
21 November 2002 (21.11.2002)

## TITLE OF INVENTION

COMPRESSED VECTOR-BASED SPECTRAL ANALYSIS METHOD AND SYSTEM FOR NONLINEAR RF BLOCKS (as amended)

## APPLICANT(S) FOR DO/EO/US

Shahin FARAHANI; Nazanin DARBANIAN; Sayfe KIAEI

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☒ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☒ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

## Items 13 to 23 below concern document(s) or information included:

13. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No. EV 333157684 US
23. ☒ Other items or information:

Copy of "Submission Of Declaration Of Inventorship In The International Application" accompanying the declaration as filed; Copies of Five (5) References

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO (if known, see 37 CFR 1.5) <b>10/535616</b>		INTERNATIONAL APPLICATION NO. <b>PCT/US2003/037298</b>		ATTORNEY'S DOCKET NUMBER <b>51579/DMC/A599</b>	
The following fees are submitted:				<b>CALCULATIONS</b>	<b>PTO USE</b>
24. <input checked="" type="checkbox"/> Basic national fee .....		<b>\$300</b>		\$ <b>\$300.00</b>	
25. <input checked="" type="checkbox"/> Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4). ....		<b>\$100</b>		\$ <b>\$200.00</b>	
All other situations. ....		<b>\$200</b>			
26. <input checked="" type="checkbox"/> Search fee .....		<b>\$100</b>			
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....		<b>\$400</b>			
International Search Report prepared and provided to the Office .....		<b>\$500</b>		\$ <b>\$100.00</b>	
All other situations. ....		<b>\$500</b>			
<b>TOTAL OF 24, 25 and 26 =</b>				\$ <b>\$600.00</b>	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)		RATE	
25 - 100 =	0 /50 =	0		x \$250.00	\$ <b>\$0.00</b>
Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	15 - 20 =	0	x \$50.00	\$ <b>\$0.00</b>	
Independent claims	3 - 3 =	0	x \$200.00	\$ <b>\$0.00</b>	
MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00				\$ <b>\$0.00</b>	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$ <b>\$600.00</b>	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$ <b>\$300.00</b>	
<b>SUBTOTAL =</b>				\$ <b>\$300.00</b>	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$ <b>\$0.00</b>	
<b>TOTAL NATIONAL FEE =</b>				\$ <b>\$300.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +				\$ <b>\$0.00</b>	
<b>TOTAL FEES ENCLOSED =</b>				\$ <b>\$300.00</b>	
				Amount to be	\$
				Amount to be	\$

a. ☒ A check in the amount of \$ **\$300.00** to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.


c. ☒ The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment  
to Deposit Account No. **03-1738**. A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card  
information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b))  
must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

**Daniel M. Cavanagh**  
**CHRISTIE, PARKER & HALE LLP**  
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Pasadena, California 91109-7068  
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SIGNATURE  
**Daniel M. Cavanagh**  
NAME  
**41,661**  
REGISTRATION NUMBER

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

EXPRESS MAIL NO.: EV 327296364 US

COPY

Regarding the Accompanying International Application of:

Intl. Appl. No. : PCT/US03/37298  
Intl. Filing Date : November 21, 2003  
Applicant : Arizona Board of Regents, acting for Ariz. St. Univ., et al.  
Title : COMPRESSED VECTOR-BASED SPECTRAL ANALYSIS  
METHOD AND SYSTEM FOR MONLINEAR RF BLOCKS  
Docket No. : 51579PCT/DMC/A599

**SUBMISSION OF DECLARATION OF INVENTORSHIP  
IN THE INTERNATIONAL APPLICATION**

Commissioner for Patents  
Mail Stop PCT  
P.O. Box 1450  
Alexandria, VA 22313-1450

Post Office Box 7068  
Pasadena, CA 91109-7068  
26 March 2004

Attn: RO/US  
Valerie Jackson, Authorized Officer

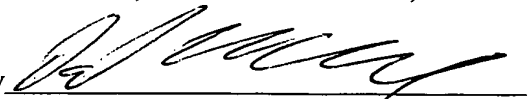
Commissioner:

Enclosed herewith is a Declaration of Inventorship which has been duly executed by inventors Shahin Farahani, Sayfe Kiaei and Nazanin Darbianian for the purposes of the designation of the United States of America in connection with the above-identified international patent application. Please file the enclosed Declaration with the subject application.

Any charges incurred in connection with filing the enclosed document may be charged to our Deposit Account No. 03-1728. Please show our docket number with any charge to our Deposit Account. A copy of this letter is enclosed.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By   
Daniel M. Cavanagh, Reg. No. 41,661  
Telephone: 626/795-9900

DMC/rmw  
Enclosure: Declaration  
RMW IRV1075757.1-\*03/26/04 3:29 PM